

REMARKS

Claims 14, 16-21, and 23-26 stand rejected under 35. U.S.C. §103(a) as being unpatentable over non-patent publication by Hamer titled "Acceptance Testing of Electrical Motors and Generators" (hereinafter Hamer) in view of US patent 4,827,487 (hereinafter Twerdochlib). An objection to the abstract of the disclosure is noted in the Office Communication. Reconsideration of the rejections, objection and allowance of all the pending claims is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-13, 15 and 22 were previously canceled. Thus, claims 14, 16-21 and 23-26 are presently pending.

The abstract of the disclosure has been amended consistent with the suggestions provided in the Office Communication. Consequently, the noted objection should be withdrawn.

Claim 14 is directed to a laminated core testing device to test a laminated core in a generator. Claim 14 in part recites a high-voltage testing device that causes a thermal response indicative of at least one hot spot in the laminated core.

The Examiner correctly acknowledges that Hamer fails to describe or suggest each of the structural and/or operational relationships of the claimed invention. Twerdochlib is applied to purportedly remedy the deficiencies of Hamer. However, as discussed in greater detail below, Twerdochlib fails to remedy the deficiencies of Hamer. Consequently, the Hamer/Twerdochlib combination fails to constitute a *prima facie* combination under the §103 statutory requirements and the rejections should be withdrawn.

At the outset applicant respectfully notes that the Office Communication misconstrues the relevance of Twerdochlib regarding the claimed invention. Firstly, neither the present invention nor Hamer is directed to continuous monitoring of temperature during operation of the machine, as Twerdochlib is. See Twerdochlib col. 1, lines 24-25. Accordingly, Twerdochlib requires during manufacture of the coils of the machine structural modifications for accommodating temperature sensing probes. See Twerdochlib col. 4, line 30 et. seq. Even more fundamental, the Office Action misconstrues cause and effect. The claimed invention is directed to a testing device that causes a thermal response indicative of at least one hot spot in the laminated core. Twerdochlib is directed to a distributed temperature sensing system for

continuously monitoring temperature during routine operation of the machine. One skilled in the art would appreciate that the hot spots in Twerdochlib are not caused by his distributed temperature sensing system. This is fundamentally opposite to the claimed invention where the testing device causes a thermal response indicative of at least one hot spot in the laminated core.

The Office Communication dated 07/09/2008 cites col. 2 lines 2-7 of Twerdochlib as purportedly describing a high-voltage testing device. For the convenience of the reader, this excerpt of Twerdochlib is reproduced below in its entirety.

*A distributed sensing system suitable as an on-line temperature monitor in a power plant environment must be compatible with the high voltage dielectric requirements of the stator winding insulation and must have little or no signal drift over the normal operating temperature range.*

One skilled in the art will recognize that the foregoing excerpt merely mentions compatibility requirements between Twerdochlib's distributed temperature sensing system and the stator winding insulation and will further recognize that this excerpt has nothing to do with any testing device, and much less with a testing device as set forth in the claimed invention. It is error for the Examiner to somehow construe that the above-cited excerpt describes or suggests any testing device. On this point alone, the combination proposed by the Examiner cannot serve as a predicate for appropriately sustaining a *prima facie* case of obviousness with respect to the claimed invention.

Secondly, the Office Communication cites col. 6 line 64-col. 7 line 11 of Twerdochlib as being relevant to the claimed invention.

*By way of example, FIG. 7 illustrates in simplified form the operation of an acoustic monitoring system 54 for measuring temperature shifts and the position of temperature shifts in a coil section 14. With a waveguide 56 threaded through a coil section 14, a first end 58 of the waveguide is coupled to a first acoustic transducer 60 and a second end 63 of the waveguide 56 is coupled to a second acoustic transducer 64. A signal generator 66, coupled to the first transducer 60 transmits a high frequency, e.g., 50 Mhz, acoustic probe signal into the waveguide 56. The first and second transducers 60*

*and 64 are coupled to first and second pulse detectors 68 and 70 for monitoring reflective and transmitted pulses and their arrival times. If the waveguide 56 has a significant hot spot positioned about a point B, illustrated in FIG. 7, the corresponding density variation will cause a significant portion of a probe signal emitted from the first transducer 60 to reflect back to the first transducer 60 for detection.*

One skilled in the art will appreciate that the foregoing excerpt refers to an acoustic wave temperature monitoring system and merely describes operational aspects of such a temperature monitoring system. Again, one skilled in the art would appreciate that such a temperature monitoring system is not a testing device that causes a thermal response indicative of at least one hot spot in the laminated core as set forth in the claimed invention. One skilled in the art would appreciate that the acoustic wave temperature monitoring system of Twerdochlib simply monitors temperature changes but is not a testing device that causes hot spots as set forth in the claimed invention.

In view of the foregoing remarks, it is respectfully submitted that Hamer and Twerdochlib, singly and in combination, fail to teach or suggest each of the structural and/or operational relationships set forth in claim 14. Consequently, the Hamer/Twerdochlib combination fails to obviate claim 14 under the §103 statutory requirements and this rejection should be withdrawn. Since claims 14, and 16-20 include the structural and/or operational relationships respectively recited in claim 14, it is also respectfully submitted that the Hamer/Twerdochlib combination also fails to render unpatentable such dependent claims.

Claim 21 is directed to a high-voltage testing device for testing a laminated core in a generator. Claim 21 in part recites the high-voltage testing device comprises a frequency converter for converting the fundamental frequency to a frequency that is greater than 50 Hz. A field winding is energized at the greater frequency value to cause a thermal response indicative of at least one hot spot in the laminated core. In view of the foregoing discussion regarding the Hamer/Twerdochlib combination, it is respectfully submitted that such a combination also fails to obviate claim 21 (and claims depending there from) under the §103 statutory requirements and these rejections should be withdrawn.

Claim 26 is directed to a method for testing for faults in a laminated core of a generator. Claim 26 has been amended consistent with the structural and/or operational relationships discussed above in the context of independent claims 14 and 21. In view of the foregoing discussion regarding the Hamer/Twerdochlib combination, it is respectfully submitted such a combination similarly fails to obviate claim 26 under the §103 statutory requirements and this rejection should be similarly withdrawn.

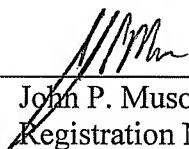
Conclusion

It is respectfully submitted that each of the claims pending in this application recites patentable subject matter and it is further submitted that such claims comply with all statutory requirements and thus each of such claims should be allowed.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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By:   
John P. Musone  
Registration No. 44,961  
(407) 736-6449

Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, New Jersey 08830